

# I4 Heave Industry Zoning Emissions

## Motion Backgrounder

On November 17th we will be debating my motion on changing the I4 Heavy Industry zoning in Nanaimo. The following provides background information on why this motion is important.

### **Here is the motion wording**

*That staff prepare a zoning amendment to Bylaw 4500 that prohibits the following industrial scale uses.*

- 1. Waste-to-energy incineration and garbage incineration facilities, excluding facilities that utilize biomass or gases created on-site as byproducts of production or manufacturing processes for cogeneration purposes.*
- 2. Chemical plants that produce emissions containing volatile organic compounds, nitrogen oxides, sulphur dioxides or other compounds that negatively affect human health or the environment*
- 3. Thermal electricity generation from fossil fuels or biomass harvested solely for energy production purposes*
- 4. Petroleum refineries*
- 5. Liquefied natural gas (LNG) export facilities*
- 6. Other emission-intensive industries with emissions that negatively affect human health or the environment.*

This motion ensures that any future proposals for emission heavy industries will have to go through a site specific rezoning process that involves staff reports, public hearings, input from the Snuneymuxw First Nation and receive the support of Nanaimo City council. This motion does not affect industrial land owned by the Nanaimo Port Authority but it does send a strong signal to the NPA about what is and what is not acceptable to the City of Nanaimo and its residents.

This motion is not about blocking these industrial uses in perpetuity, it is about ensuring that we have a proper democratic process to evaluate project proposals. Currently we have a 'carte blanche', 'anything goes' approach to the zoning of industries that could add toxins to our airspace. A foreign multinational such as DOW Chemical could buy land at Duke point, build a garbage incinerator to burn garbage from Metro Vancouver and use the energy to power a refinery or petro-chemical plant. If city council and residents of Nanaimo stopped them it could cost Canadian and Nanaimo taxpayers hundreds of millions of dollars under current trade agreements and legal requirements.

There are a number of reasons why this zoning change is important.

1. Health Concerns
2. Democratic Authority over local decisions (International Trade and Investment)
3. Zero Waste - rejecting False Solutions
4. Environmental Racism
5. Climate Change

## 1. Health Concerns related to Industrial emissions

Petrochemical plants and the combustion of fossil fuels releases [Volatile organic compounds \(VOCs\)](#) such as benzene, toluene, and xylene, which contribute to the formation of ground-level ozone. Benzene is a byproduct of burning fossil fuels including methane (natural gas).

**Exposure to volatile organic compounds (VOCs)** can cause short-term effects like eye, nose, and throat irritation, headaches, nausea, dizziness, and loss of coordination. Long-term or high-level exposure can lead to more serious issues, including damage to the liver, kidneys, and central nervous system, and some VOCs are known or suspected carcinogens.

[Exposure to benzene](#), a known human carcinogen, is associated with a range of acute and chronic health effects, including cancer and various blood disorders. The severity of the effects depends on the dose, duration, and frequency of exposure. Long-term health effects from chronic exposure to benzene, even at low levels, is linked to a higher risk of developing serious, and potentially fatal, conditions including [leukemia and other blood cancers](#), bone marrow damage, reproductive problems in women and genetic damage.

**Exposure to nitrogen oxides** can cause immediate respiratory irritation, worsening asthma and COPD, causing coughing, wheezing, and shortness of breath. Long-term exposure is linked to decreased lung function, increased risk of developing asthma, and a greater susceptibility to respiratory infections. Children, the elderly, and people with pre-existing respiratory conditions are at greater risk. Nitrogen oxides are a byproduct of combustion, especially the combustion of fossil fuels.

**Exposure to sulfur dioxide (SO<sub>2</sub>)** can cause irritation to the nose, throat, and lungs, leading to symptoms like coughing, wheezing, and shortness of breath. High concentrations can result in more severe effects such as bronchial inflammation, asthma attacks, and fluid accumulation in the lungs (pulmonary edema). Long-term exposure is linked to reduced lung function, increased risk of respiratory infections, and can worsen pre-existing conditions like asthma, COPD and heart disease. Sulfur dioxide is a byproduct of combustion, especially the combustion of fossil fuels.

### Precautionary Principle

The old saying is that “the solution to pollution is dilution” but it’s always been known that saturation can become a serious problem. There is more and more evidence to demonstrate that low-levels of some compounds can be very dangerous to human health and the

environment. We already have a large emitter at Duke Point with Harmac, we should be cautious about what other emission sources are approved within the Nanaimo airspace.

## 2. Democratic Authority

There have been a series of proposals for industries at Duke Point that have created considerable public backlash in the past including a proposal for a chromium plant in 1980's, proposals for garbage incinerators in 1991 and 2001, a gas fired thermal generation plant in 2005 and a proposal for a garbage incinerator in 2014. All of these proposals would have added significant pollutants to the airshed in the Nanaimo area.

### **The Impact of International Trade agreements**

The most recent proposals listed above were all put forward by Canadian proponents. The gas fired thermal generator was a BC Hydro proposal, the garbage incinerator was proposed by Metro Vancouver in partnership with Wheelabrator, a US corporation. But if Wheelabrator had purchased land at Duke Point and had proposed a garbage incinerator with the current zoning and it was turned down by council or if the zoning was changed to block the proposal then Wheelabrator would have been able to seek damages under Chapter 11, the Investor State Dispute Settlement provisions (ISDS) of the North American Free Trade Agreement (NAFTA). Changing regulations or zoning would likely have been ruled as a form of 'indirect expropriation' and 'discrimination' under Chapter 11 and Wheelabrator could have sought damages for the 'loss of potential profit'. ISDS gives foreign corporations rights and powers that domestic corporations do not have. When NAFTA was replaced by the CUSMA agreement the ISDS provisions were removed but ISDS is embedded in multiple bilateral and multilateral free trade agreements (FTA's) including the CETA, CAFTA and the TPP FTA's as well as the Foreign Investment Promotion and Protection Agreements (FIPPA's) that Canada is a signatory to.

### **Investor State Dispute Settlement**

ISDS allows foreign corporations to seek damages for the 'loss of potential profit' when laws and policies are implemented which get in the way of their projects and profitability. The government of Canada has paid out hundreds of millions of dollars under these provisions.

Canada has signed 38 Foreign Investment Promotion and Protection Agreements most of which have ISDS provisions embedded in them. In almost every case ISDS claims are adjudicated in a private tribunal system that takes place behind closed doors with the results only published afterward the tribunal rulings. In the case of the Canada-China FIPPA, both parties must agree to make the ISDS complaint and settlement public. [OsGoode Hall professor Gus Van Harten](#) is an expert on ISDS but unlike other legal experts in this area, he has never been part of the revolving door of the tribunal system and therefore does not have a vested interest in ISDS. He is very critical of the ISDS system and has written several books including [The Trouble with Foreign Investor Protection](#) and [Sold Down the Yangtze : Canada's Lopsided Investment Deal with China](#) about the FIPPA agreement the Harper government signed with China.

I have spent years studying ISDS in agreements like NAFTA, CAFTA, CETA and the TPP. I sat on the international trade and investment committee while I was a board member on the national board of the Council of Canadians. For six years I was the International Trade and Investment critic for the Green Party of Canada. When I was an MP I was part of the debate over the CAFTA/USMCA (the update to NAFTA) and fought hard to have ISDS removed from the agreement (President Trump didn't like ISDS either, otherwise it would still be in the new agreement). I have worked on film projects on the subject including **a short video [ISDS 101: Investor State Dispute Settlements Explained](#) which provides a quick primer on what is wrong with ISDS and why we should be concerned about it.**

### 3. Zero Waste and False Solutions

The Regional District of Nanaimo is committed to zero waste which is a real solution and will help us build a circular economy. Burning waste is a false solution. Once a waste incinerator is built it will need to continue to be fed, which will lead to the importation of garbage from other regions. Burning waste pours persistent organic pollutants (POP's) into the airspace which can cause serious health problems. This is why [B.C. physicians are calling for the shutdown of the Burnaby waste burning plant.](#)

The proper way to eliminate waste is through the principle of a circular economy utilizing things such as deconstruction bylaws to ensure that as much material as possible is reused or recycled.

Burning biowaste from scraps left behind in clear cuts by the forest industry is not economically viable. It's too expensive to extract for the economies of scales needed to run biofuel generators. The Fifth Estate did an expose '[Why wood from B.C. forests is burning to fuel U.K. energy needs](#)' on the Drax wood pellet incinerators in the UK. Drax is receiving wood from BC. This is not waste wood being processed and burned because it's not economical, they are grinding up full trees and logging old growth to turn into pellets.

### 4. Environmental Racism

[Environmental racism](#) is a form of systemic racism where environmental decision-making, policies, and practices result in certain racialized communities, particularly Indigenous and Black communities, facing a disproportionate burden of environmental hazards.

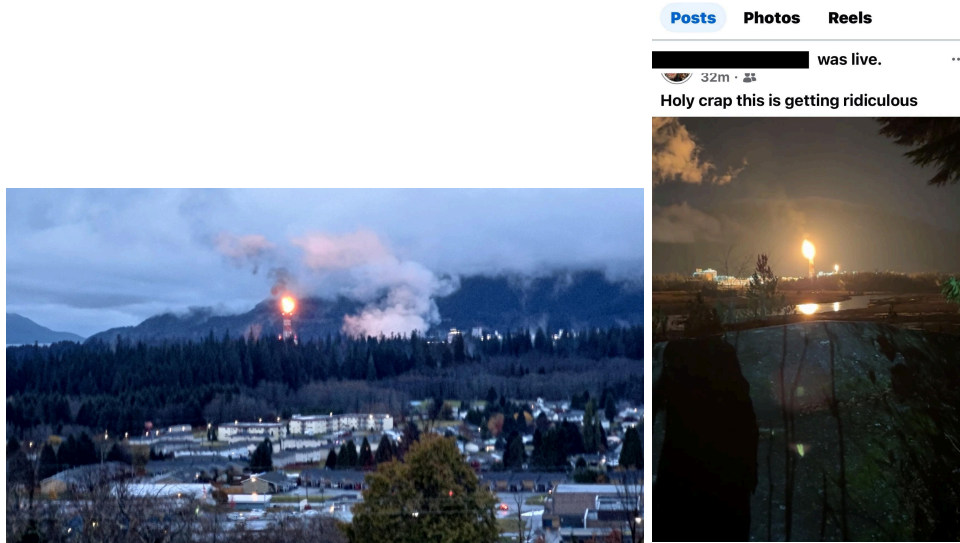
In Canada there are many examples of pulp mills, refineries and petro-chemical plants in close proximity to First Nation reserves including Sarnia's 'chemical valley', Grassy Narrows, Boat Harbour, Kitamat, Powell River etc. The Snuneymuxw reserves have been surrounded by industry for decades.

In many situations there are financial incentives for First Nations to invite industrial activity onto their traditional territories and close to communities but the trade-off can be the health of the community.

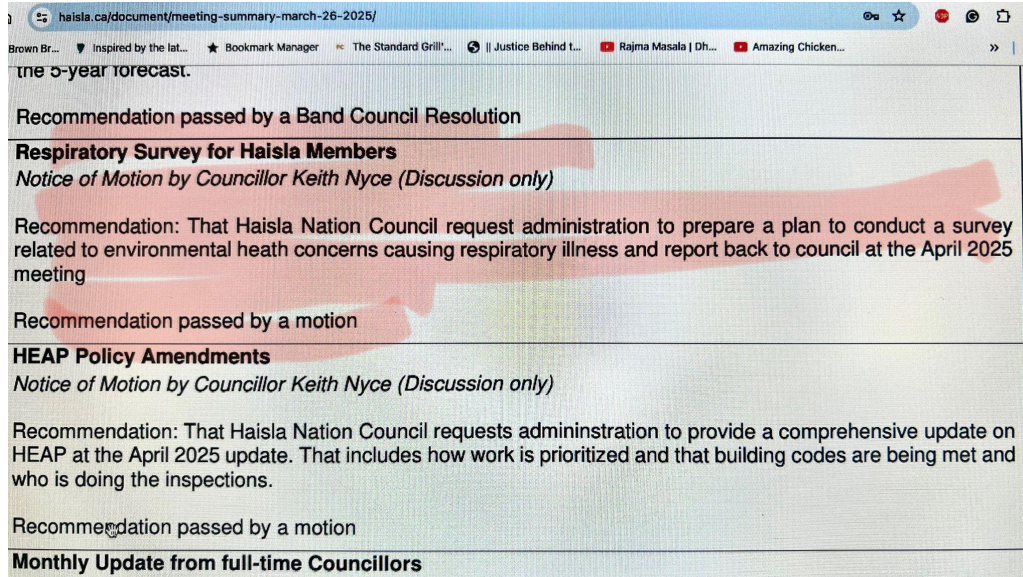
The Haisla Nation in Kitamaat has been dealing with poisons from Eurocan and Alcan for decades. They were sold on the idea of 'clean LNG' as an economic solution for the nation but the reality is much different. This [video on Facebook](#) shows the smoke containing benzene, nitrogen oxide and other pollutants spewing from the 100 meter smoke stack with up to 100 meter flares. Residents on reserve and in Kitamat townsite have had an increase in respiratory health problems since the LNG facility started flaring. This [article in the Narwhal](#) outlines the extent of flaring and the health challenges people are facing. The Haisla Nation has been surveying members about the increase in respiratory health problems. [A leaked contract](#) reveals LNG Canada offered to pay at least one Kitimat resident to temporarily "relocate" if they agreed not to raise concerns or to sue if operations damaged their property. LNG Canada is anything but Canadian... It consists of five foreign multi-nationals that have zero connection to the local community. LNG is not a clean industry - not upstream in the fracking fields and not downstream at the LNG plants.

Residents of RDN Areas A and B and the Snueymuxw reserves IR2, IR3 and IR4 are the closest residential areas to Nanaimo's heavy industry zone at Duke Point. All of the residents of these communities should have input on the addition of any emission heavy industries being proposed at Duke Point. The Snuneymuxw First Nation should not just be consulted, they should also have to approve any heavy industry that affects the health of their community members.

## Images from LNG Canada facility and Facebook comments



**LNG Canada from Kitamat Townsite and Kitamaat Village**



## 5. Climate Change

Any emissions from the sources listed in the motion will contain greenhouse gases and will contribute to anthropogenic fueled climate change. Those that understand and accept the [science](#), understand and accept the science. We need to reduce emissions... full stop.